

REMARKS

Claims 2-11 and 13-40 are pending in this application. Claims 2-7, 10, 11, 13, 14, 17, 29-31, 36 and 37 stand rejected. Claims 15, 16, 18-28, 32-35 and 38-40 are allowed. Claims 8 and 9 are objected to. It is believed that this Amendment is fully responsive to the Office Action dated **May 18, 2005**.

Claim rejections under 35 USC §103

Claims 2-7, 10-11, 13-14, 17, 29-31 and 36-37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of U.S. Patent 5,675,672 to Nakabayashi and Japanese Patent Publication 10-69536 to Nakamura et al.

The present invention is a document processing device in which a large document may be partitioned into a number of regions which are scanned in separately. An overlapping detecting unit detects overlapping sections of the document images by comparing positions and sizes of character regions in the document images.

Nakabayashi describes a two-dimensional linker that is able to take a document (32) that is partitioned and scanned by a first scan (28) and a second scan (30). An optical character reader (12) is able to recognize the ASCII characters in the two documents and saves each into a first memory (14) and a second memory (16). An aligner (20) identifies the duplicate characters in each document and eliminates the duplicates from one of the documents. A linking means then takes the two documents and forms a single documents stored in a third memory (26). As illustrated in figure 4,

the aligner (20) searches for duplicated phrases. In addition, as illustrated in figure 5, the aligner (20) may search for duplicated columns of characters.

The English language abstract of Nakamura et al. describes an image synthesizer in which a rectangle of information is extracted from the image. A rectangle information operating part (6) positions images to be synthesized is found by using information such as size, relative position and aspect ratio of the rectangle.

Independent claims 2, 3, 13, 14, 17, 29, 36 and 37 are amended to add the feature that “a overlapping detecting unit detecting an overlapping position based on a character recognition result of a low graphics ratio region in a first document, and a character recognition result of a corresponding region in a second document”. The prior art of record fails to disclose this feature. Therefore, claims 2, 3, 13, 14, 17, 29, 36 and 37 patentably distinguish over the prior art of record by reciting, as exemplified by claim 2,

“A document image processing device, comprising: character region extracting unit extracting character regions respectively from a plurality of document images which are partitioned and read; overlapping detecting unit detecting character regions whose matching degrees are high by making a comparison between positions and sizes of the respective character regions extracted by said character region extracting unit, and detecting an overlapping of the plurality of document images based on positions of the detected character regions whose matching degrees are high; and image merging unit merging the plurality of document images at an overlapping position detected by said overlapping detecting unit, wherein the overlapping detecting unit further detects an overlapping position based on a character recognition result of a low graphics ratio region in a first document of the plurality of document images, and a character recognition result of a corresponding region in a second document of the plurality of document images.” (Emphasis Added)

Therefore, withdrawal of the rejection of claims 2-7, 10-11, 13-14, 17, 29-31 and 36-37 under 35 U.S.C. §103(a) as being unpatentable over the combination of U.S. Patent 5,675,672 to Nakabayashi and Japanese Patent Publication 10-69536 to Nakamura et al. is respectfully requested.

Allowable Subject Matter

Claims 15-16, 18-28, 32-35 and 38-40 have been allowed. Further, claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 8 has been amended to include all the limitations of claim 2 and thereby making it an independent claim. Therefore, allowance of claims 8 and 9 is respectfully requested.

Conclusion

In view of the aforementioned amendments and accompanying remarks, the claims, as amended, are believed to be allowable and in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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